

THE HEALTH IMPACT OF SEXUAL VIOLENCE AMONG WOMEN IN A PLATINUM MINING BELT

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BACKGROUND

- Physical and sexual intimate partner violence (IPV) and forced-sex or sexual acts by non-partners (NP-rape) are common in South Africa.^{1,2}
- Rustenburg Municipality (RM) is within Bojanala district, is South Africa's platinum mining capital and contains one of Africa's fastest growing cities (Figures 1 & 2). The population includes 301,795 men and 247,780 women – many of whom live in informal settlements near the mines.
- Morbidity and mortality can be prevented when survivors have timely access to medical services such as post-exposure prophylaxis (PEP) for HIV and sexually transmitted infections (STIs), counseling and social services. However, inadequate provision and limited access to quality care mean that consequences of NP-rape and IPV remain largely unaddressed.
- Barriers to access
 - Lack of awareness of health services
 - Limited coverage of sexual violence healthcare services:
 - Only 10 designated facilities in Bojanala district (population:1,507,505) with varying levels of functionality.
- Gaps in quality service provision
 - Failure to recognize sexual violence as a medical emergency;
 - Poorly defined minimum standards of care;
 - Narrowly disseminated national protocol;
 - Lack of trained staff (forensic nurse, counselors);
 - Weak referral network;
 - Lack of privacy for examination;
 - Lack of access to and training in the use of evidence collection kits.³

Essential package of care

- Comprehensive medical assessment, including forensic examination
- First aid to treat injuries
- Medicine and post-exposure prophylaxis (PEP) to prevent HIV infection and treat other sexually transmitted infections (STIs)
- Emergency contraception to prevent unwanted pregnancies
- Vaccinations to prevent hepatitis B and tetanus
- Psychosocial care (psychological support and social work intervention)

OBJECTIVE

- We quantified the prevalence of IPV and NP-rape in this setting, and estimated the associated disease burden. By considering this alongside levels of access to services, we describe the extent to which opportunities to address this disease burden are realized.

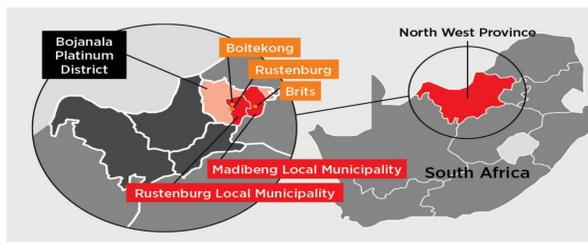


Figure 1. Boundary of Rustenburg Municipality and Bojanala district

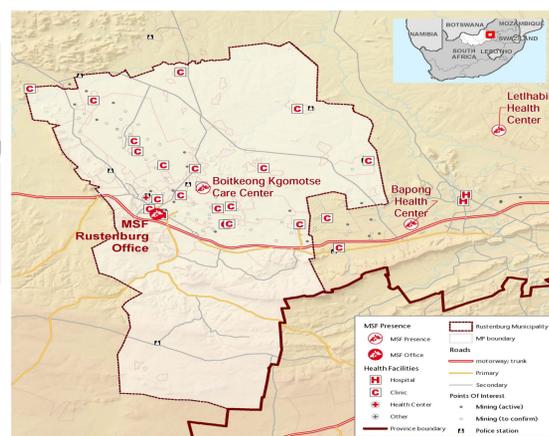


Figure 2. Health facilities and mining activities in Rustenburg Municipality (right)

METHODS

- A cluster-randomized household survey of women 18-49 years living in RM was conducted (Nov– Dec, 2015) to determine the prevalence of IPV and NP-rape.⁴
- We used WHO estimates of disease risk⁵ to determine population attributable fractions (PAF) and applied the PAFs to the population distribution⁶ and local disease prevalence estimates obtained through literature review to determine burden of disease.^{7,8}



Figure 3. MSF health promoters in Rustenburg encourage people to access health care when sexual violence occurs



Figure 4. advertisement of "backstreet" abortion on the streets in Rustenburg

RESULTS

- Eighty-five percent (n=882/1,038) of eligible women participated.
- Lifetime prevalence of IPV was 45% → 82,000 women.
- Lifetime prevalence of NP-rape was 18% → 28,000 women and girls.
- Few sought care → 5% told a health care professional about their experiences, 4% a counselor, and 3% a social worker.
- Disease burden attributable to IPV (Table 1 & Figure 5)
 - 6,765 cases of HIV
 - 1,296 cases of induced abortion
 - 5,022 major depressive disorder (MDD)
 - 2 suicide
- Disease burden attributable to NP-Rape (Table 1)
 - 2,012 MDD cases

Table 1: Population attributable fractions for sexual and physical intimate partner violence, and forced sex or sexual acts (rape) by non-partners.

Domain	Disease	IPV	NP-FS
		PAF (95% CI)	PAF (95% CI)
Mental health	Alcohol use disorders	27.9 (1.8, 49.5)	19.3 (17.2, 21.6)
	Major depressive disorders	30.4 (20.1, 40.0)	22.3 (3.0, 46.0)*
	Suicide	61.4 (26.0, 82.7)	-
Sexual health	HIV/AIDS	19.0 (1.3, 35.6)	-
	Syphilis infection	21.5 (9.8, 32.7)	-
Reproductive health	Induced abortion	34.3 (28.4, 40.1)	-

* Major depressive disorder combined with anxiety disorders

** Major depressive disorder

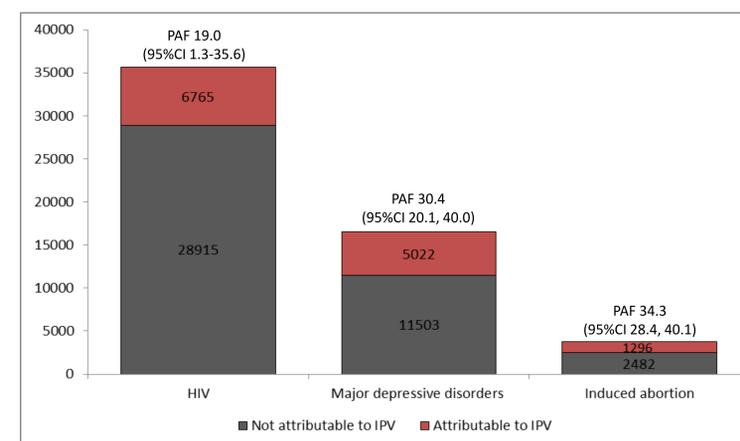


Figure 5: Disease burden attributable to sexual and physical intimate partner violence.

CONCLUSION

- Our analysis suggests that IPV and NP-rape are extremely common among women and girls living in Rustenburg Municipality
- IPV and NP-rape contribute to a large disease burden
 - 1/5 of HIV prevalence
 - More than 1/3 of major depressive disorder cases
- Few sexual violence survivors sought healthcare when the incident occurred
- With the essential package of care for sexual violence survivors, much of the disease burden can be avoided. However, barriers to access and gaps in service provision of SV healthcare mean that cases are left untreated, leading to high disease burden.
- Therefore, there is urgent need to
 - Raise awareness in affected communities around the benefits of accessing healthcare following incidents of SV;
 - Expand the availability and accessibility of quality medico-legal and psychosocial services at health facilities
 - Develop provincial and national guidance on minimum standards for quality service provision for SV survivors

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Reference:

- Jewkes RK, Dunkle K, Nduna M, et al. Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. *Lancet (London, England)*. 2010;376(9734):41-48. doi:10.1016/S0140-6736(10)60548-X.
- Dunkle KL, Jewkes RK, Brown HC, et al. Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *Lancet (London, England)*. 2004;363(9419):1415-1421. doi:10.1016/S0140-6736(04)16098-4.
- "Other patients are really in need of medical attention"- the quality of health services for rape survivors in South Africa. *Bull World Health Organ*. 2005;83(7).

- Médecins Sans Frontières. *Untreated Violence: The Need for Patient-Centred Care for Survivors of Sexual Violence in the Platinum Mining Belt*. Cape Town; 2016.
- WHO, Department of Reproductive Health and Research, London School of Hygiene and Tropical Medicine SAMRC. *WHO | Global and Regional Estimates of Violence against Women*. World Health Organization; 2013.
- Statistics South Africa. 2011 Census products | Statistics South Africa. http://www.statssa.gov.za/?page_id=3955. Accessed January 31, 2017.
- World Health Organization. Global Health Observatory Data Repository. <http://apps.who.int/gho/data/node.main>. Published 2014. Accessed January 30, 2017.
- Tomlinson M, Grimsrud AT, Stein DJ, Williams DR, Myer L. The epidemiology of major depression in South Africa: results from the South African Stress and Health study. *SAMJ South African Med J*. 2009;99(5):368-373.